JVC AV-21TS2EK

General Information

Also Covers
AV-21TS2EN
JE Chassis

Matrix

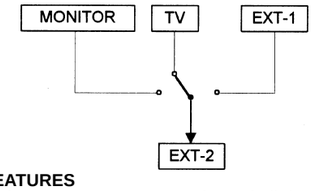
Item	See Model	Vol
Safety Precautions	JVC AV-28WFR1 EKS	8
Other Adjustments	JVC AV-29TS2 EK	6

Recommended Safety Parts

Item	Part No.	Description		
[AV-21TS2EK]				
1	CM12774-A01-E	REAR COVER		
5	CQ40319-001-E	INST BOOK		
10	AEEMP003-185	POWER CORD		
11	CM46618-A01-E	POWER CORD CLAMP		
12	CM22875-014-E	RATING LABEL		
13	CM23158-002-E	RATING LABEL	For GBR/ESP	
C1521	QFZ0125-952N	MPP CAP.	9500pF 200V ±2.5%	
C1524	QFZ0119-254S	MPP CAP.	0.25µF 200V ±3%	
C1531	QFZ0119-154S	MPP CAP.	0.15µF 200V ±3%	
C1902	QCZ9034-472A	C CAP.	4700pFAC400V	P
C1903	QCZ9034-472A	C CAP.	4700pFAC400V	P
C1904	QCZ9034-472A	C CAP.	4700pFAC400V	P
C1992	QCZ9041-471A	C CAP.	470pFAC400V	K
C1993	QCZ9041-332A	C CAP.	3300pFAC400V	M
C8901	QFZ9040-474N	MF CAP.	0.47µFAC275V	M
C8904	QFZ9040-473N	MM CAP.	0.047µFAC275V	M
CP1952	ICP-N50-Y	I.C. PROTECT		
CP1953	ICP-N50-Y	I.C. PROTECT		
D1901	D3SBA60	DIODE BRIDGE		
F8901	QMF51D2-3R15J1	FUSE	3.15A	
FR1551	QRZ0054-4R7M	F R	4.7Ω 1/4W	J
FR1552	QRH017J-1R0M	F R	1Ω 1W	J
FR1553	QRH017J-1R0M	F R	1Ω 1W	J
FR1954	QRH017J-1R2M	F R	1.2Ω 1W	J
FR1968	QRZ0054-331M	F R	330Ω 1/4W	J
IC1902	TLP721F (D4-GR)	I.C. (PH.COUPLER)		
L01	CELD018-005J7	DEGAUSSING COIL		
LF8901	AEELF002-001	LINE FILTER		
Q1521	BU2506DX	POWER TRANSISTOR H OUT		
R0403	QRZ0054-470M	F R	47Ω 1/4W	J
R1585	QRV141F-2941AY	MF R	2.94kΩ 1/4W	F
R1586	QRV141F-1582AY	MF R	15.8kΩ 1/4W	F
R1991	QRZ0057-825	C R	8.2MΩ 1W	J
S8901	QSP4K21-C01	PUSH SWITCH MAIN POWER		
SK3001	CE42535-001J1	C.R.T.SOCKET		
T1551	QQH0018-001	FLYBACK TRANSF.		
T1901	CETS085-001J4	SWITCH.TRANSF.		
TH8901	CEKP010-001J2	W.P. THERMISTOR		
V01	A51EAL155X01	PICTURE TUBE (ITC)		
[AV-21TS2EN Only]				
5	CQ40317-001-E	INST BOOK For GBR/GER/FRA/NED/ITA/ESP		
6	CQ40318-001-E	INST BOOK For FIN/NOR/DEN/SWE/POR		
10	AEEMP001-185	POWER CORD		
12	CM23156-A04-E	RATING LABEL For GBR/GER/ITA		

SAFETY PRECAUTIONS - See Matrix

FEATURES
1. The TELETEXT SYSTEM has a built-in FASTEXT, TOP & WST system.
2. By means of AUTO SET, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.
3. Built-in ECO (ECONOMY, ECOLOGY) MODE
   In accordance with the brightness in a room, the brightness and/or contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
4. The audio circuit has a built-in A2/NICAM stereo system.
5. The EXT-2 TERMINAL (21-pin Euro connector) can select the output circuit as shown in Fig.



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5. The EXT-2 TERMINAL (21-pin Euro connector) can select the output circuit as shown in Fig.

MAIN DIFFERENCE PARTS LIST

(See table opposite).

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER
1. Unplug the power cord.
2. Remove the 6 screws marked X as shown in the figure.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS
• After removing the rear cover.
1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
2. Withdraw the chassis backward. (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERMI. BOARD
• After removing the rear cover.
1. While raising the claw marked A, remove the top of the AV TERMI. board slightly in the direction of arrow B as shown in Fig. 1.
2. Pressing the claws marked C, remove the AV TERMI. Board in the arrow direction marked D as shown in Fig. 2 (Opposite).

REMOVING THE CONTROL BASE
1. While pushing down the claws marked E remove the CONTROL BASE in the arrow direction F as shown in Fig. 3. (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER
• After removing the rear cover.
1. Remove the two screws marked Y as shown in figure.
2. Follow the same steps when removing the other hand speaker.

CHECKING THE PW BOARD
1. To check the back side of the PW Board.
1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]
• When erecting the chassis, be careful so that there will be no contacting with other PW Board.
• Before turning on power, make sure that the wire connector is properly connected.

WIRE CLAMPING AND CABLE TIES
1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

SETTING VALUES OF SYSTEM CONSTANT SET

Setting item
1. COUNTRY

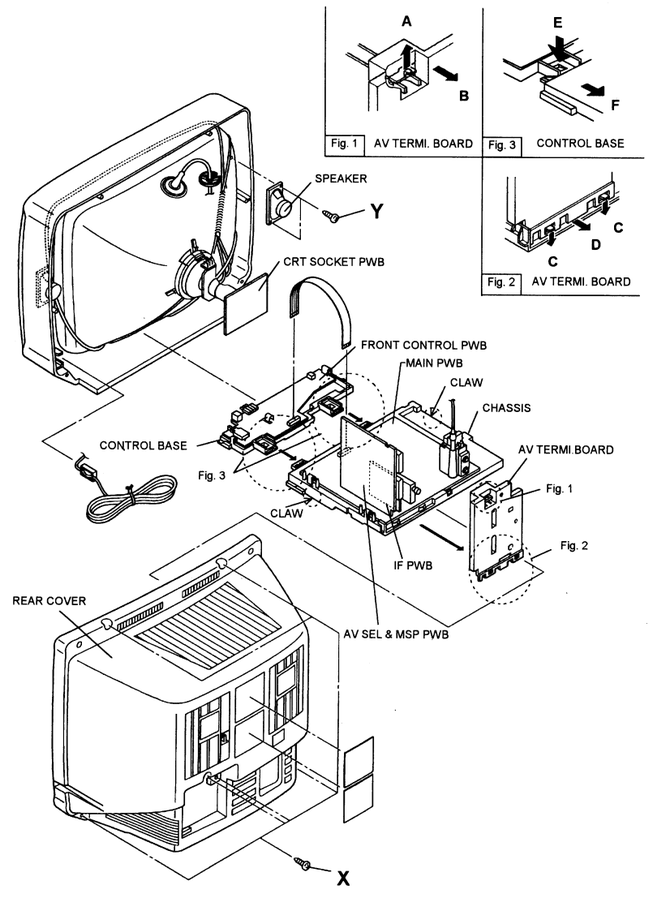
Setting content

→ PF → IR → UK → EN

Setting item
2. INCH

→ 21 → 25 → 29

⚠	Parts Name	AV-21TS2EN	AV-21TS2EK
	MAIN PWB ASS'Y	SJE-1003A-U2	SJE-1904A-U2
	AV SEL & MSP PWB ASS'Y	SJE0S002A-U2	SJE0S903A-U2
	IF CONTROL PWB ASS'Y	SJE0F001A-U2	SJE0F901A-U2
	FRONT CABINET ASS'Y	CM12772-00E-E	CM12772-00D-E
	DOOR	CM22994-003-E	CM22994-002-E
⚠	POWER CORD	AEEMP001-185	AEEMP003-185A
	PACKING CASE	AEM1002-A40-E	AEM1002-A42-E
	REMOCON UNIT	RM-C795-1E	RM-C794-1E
⚠	INST BOOK	CQ40317-001-E (For GBR / GER / FRA / NED) CQ40318-001-E (For FIN / NOR / DEN / SWE)	CQ40319-001-E
	SET-UP GUIDE	×	CQ40320-001-E
	PACKING CUSHION	CP11510-00C-E	CP11510-00D-E
	S.DIAGRAM (Only for ITALY)	21TS2EN-HSAE	×
⚠	RATING LABEL	CM23156-A04-E (For GBR / GER / ITA) CM23158-002-E (For GBR / ESP)	CM22875-014-E
	EURO LABEL	AEM1038-051-E	AEM1038-050-E



Setting value [AV-21TS2EN]
EN
21"

Setting value [AV-21TS2EK]
UK
21"

USER SETTING VALUES - See Matrix

SERVICE MENU SETING ITEMS

Setting item:
1. IF

Setting value:
1. VCO
2. DELAY POINT

Setting item:
2. V/C

Setting value:
1. CUT OFF
2. DRIVE
3. BRIGHT
4. CONT.
5. COLOUR(PAL./SECAM/NTSC)
6. TINT(NTSC)
7. BLACK OFFSET(SECAM)
8. SHARP *(Do not adjust)*
9. TEXT(RGB) CONT *(Do not adjust)*
10. DC TRAN RATE *(Do not adjust)*
11. BLACK STRETCH *(Do not adjust)*
12. B.S.OFF *(Do not adjust)*

Setting item:
3. AUDIO *(Do not adjust)*

Setting value:
1. CONC LIMIT
2. A2 ID THR

Setting item:
4. DEF.

Setting value:
2. V-SHIFT
3. V-SIZE
4. H-CENT
7. V-S. CR (Fixed)
10. ABL POINT (Do *not adjust)*
11. ABL GAIN (Do *not adjust)*

Setting item:
5. VSM PRESET (COOL/NORMAL/WARM)

Setting value:
1. BRIGHT
2. CONT.
3. COLOUR
4. SHARP
5. TINT
6. R DRIVE
7. B DRIVE
8. BASS
9. TREBLE

Setting item:
6. VPS *(Do not adjust)*

Setting value:
VPS

Setting item:
7. AUTO PROGRAM *(Do not adjust)*

Setting value:
ON/OFF

BEFORE STARTING SERVICE ADJUSTMENTS - See Matrix

BASIC OPERATION OF SERVICE MENU - See Matrix

JVC AV-21TS2EK

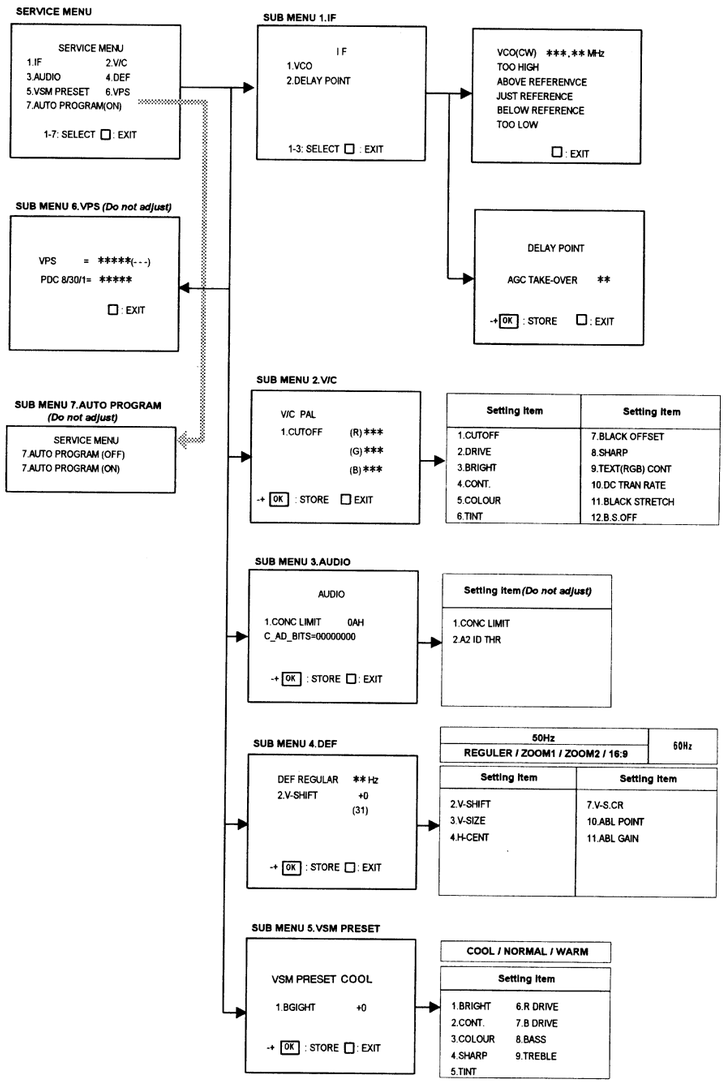


Fig. 3 SUB MENU SCREEN

For POWER SUPPLY CHECK, FOCUS, IF CIRCUIT, VSM PRESET ADJUSTMENTS - See Matrix

VIDEO/CHROMA CIRCUIT ADJUSTMENT
The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Items in ( ) are automatically set to table.

(See table opposite).

For adjustment of WHITE BALANCE, SUB BRIGHT, SUB CONT., SUB COLOUR I, SUB TINT - See Matrix

Adjustment of SUB COLOUR II

Measuring instrument:
Signal Generator
Oscilloscope
Remote Control Unit

Setting (adjustment) item		Variable range	Initial setting value
1.CUT OFF	R	-128～+127	-100
	G	-128～+127	-100
	B	-128～+127	-100
2.DRIVE	R	-128～+127	+0
	B	-128～+127	+0
3.BRIGHT		-128～+127	+0
4.CONT		-128～+127	+0

Test point:
TP-47B
TP-E
[CRT SOCKET PWB]

Adjustment part:
5.COLOUR
(PAL~NTSC)

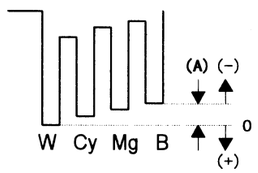
Description:
[Method of adjustment using measuring instrument]

Adjustment part:
PAL COLOUR

Description:
(PAL COLOUR)
1. Receive a PAL full field colour bar signal(75% white).
2. Select 2.V/C from the SERVICE MENU.
3. Select 7.COLOUR with the FUNCTION UP/ DOWN key.
4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key.
5. Connect the oscilloscope between TP-47B and TP-E
6. Adjust PAL COLOUR and bring the value of (A) in the illustration to +1V (voltage difference between White and Blue).
7. Press the MENU key and memorize the setting value.

Adjustment part:
SECAM COLOUR (AV-21TS2EN)

Description:
(SECAM COLOUR)
1. Receive a SECAM full field colour bar signal (75% white).
2. Set the initial setting value of SECAM COLOUR with the FUNCTION -/+ key.
3. Adjust SECAM COLOUR and bring the value of (A) of the illustration to 0 V (Voltage difference between White and Blue).
4. Press the MENU key and memorize the setting value.



Adjustment part:
NTSC 3.58 COLOUR

Description:
(NTSC 3.58 COLOUR)
1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal.
2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION -/+ key.
3. Adjust NTSC 3.58 COLOUR and bring the value of (A) of the illustration to +5V (Voltage difference between White and Blue).
4. Press the MENU key and memorize the setting value.

(NTSC 4.43 COLOUR)
1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values

For Adjustment of BLACK OFFSET (SECAM), DEFLECTION CIRCUIT, V-SHIFT, V-SIZE, H.CENTRE, V-S.CR and AUDIO CIRCUIT - See Matrix

The End

Setting (adjustment)item \ Colour system		Variable range	Initial setting value			
			PAL	SECAM	NTSC 3.58	NTSC 4.43
5. COLOUR		-60～+67	+0	←	←	(+0)
6.TINT	TV	-64～+63	——	——	+0	(+0)
	VIDEO				(+0)	(+0)
7.BLACK OFF SET	R-Y	-8～+7	+0	←	——	——
	B-Y	-8～+7	+0	←	——	——
8.SHARP *(Do not adjust)*		-36～+27	-15 (Fixed)	←	+0 (Fixed)	(+0) (Fixed)
9.TEXT(RGB) CONT *(Do not adjust)*		-128～+127	-45 (Fixed)	←	——	——
10.DC TRAN RATE *(Do not adjust)*		——	-08 (Fixed)	←	——	——
11.BLACK STRETCH *(Do not adjust)*		——	-01 (Fixed)	←	——	——
12.B.S.OFF *(Do not adjust)*		——	OFF (Fixed)	←	——	——

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AV SEL & MSP PWB ASS'Y
SJE0S002A-U2 (EN)
SJE0S903A-U2 (EK)

NOTE

*1 : 2SC2712(YG)-X
*2 : 2SA1162(YG)-X
*3 : MA3130(H)-X
*4 : MA141WK-X
BW : BUS WIRE
0 : 0Ω RESISTOR
X : NON MOUNT (OPEN)

EXT-2
COMMON GND
V2/Y2 IN
Vsel OUT
GND(V IN)
GND(V OUT)
NC(Ys IN)
C2 IN
NC(Ys OUT)
GND(R)
SDA3
NC(G IN)
SCL3
NC(G GND)
SLOW SW IN
NC(B IN)
L2 IN
GND(B)
AUDIO GND
Lsel OUT
R2 IN
Rsel OUT
J002 CEMJ001-001
L205 CE41832-001
L201-L204 CELP017-5R6Y

EXT-1
COMMON GND
V1/Y1 IN
Vtv OUT
GND(V IN)
GND(V OUT)
Ys IN
R/C1 IN
GND(Ys)
GND(R)
NC
G IN
NC
GND(G)
SLOW SW IN
B IN
L1 IN
GND(B)
AUDIO GND
Ltv OUT
R1 IN
Rtv OUT
J001 CEMJ001-001 21PIN SOCKET
L105 CE41832-001
L101-L104 CELP017-5R6Y

Q201 *1 VIDEO BUFFER
Q202 *2 VIDEO AMP
Q401 *1 I2C SW
Q402 *1 I2C SW
Q203 DTC323TK-X A MUTE
Q204 DTC323TK-X A MUTE
Q101 *1 VIDEO BUFFER
Q102 *1
Q105 *2
Q101. Q102. Q105 VIDEO BUFFER
Q103 DTC323TK-X A MUTE
Q104 DTC323TK-X A MUTE
D201 DFLC1HJ-103MZ
D402 *3
D401 *3
D101 MA3051(M)-X

IC603 X SOUND SEL
Q601 SW X
Q603 * A MUTE
Q602 * A MUTE

FRONT CONTROL PWB ASS'Y
CN00F

IC401 TEA6415 VIDEO SW
D403 100/16 MA3100(L)-X
QEN61CM-106Z

IC601 MSP3410B-PP-F7 MULTI SOUND PROCESSOR
EF601 CE42142-103Z
EF602 CE42142-103Z

IC602 (1/2) BA4558F-X LPF
IC602 (2/2) BA4558F-X LPF
D501 RD8.2E(B2)-T2

Q501 *1 BPF
Q502 X
Q503 *1 BPF
Q403 *1 VIDEO BUFFER

CN002
MAIN PWB ASS'Y

DIFFERENCE LIST(*PARTS)

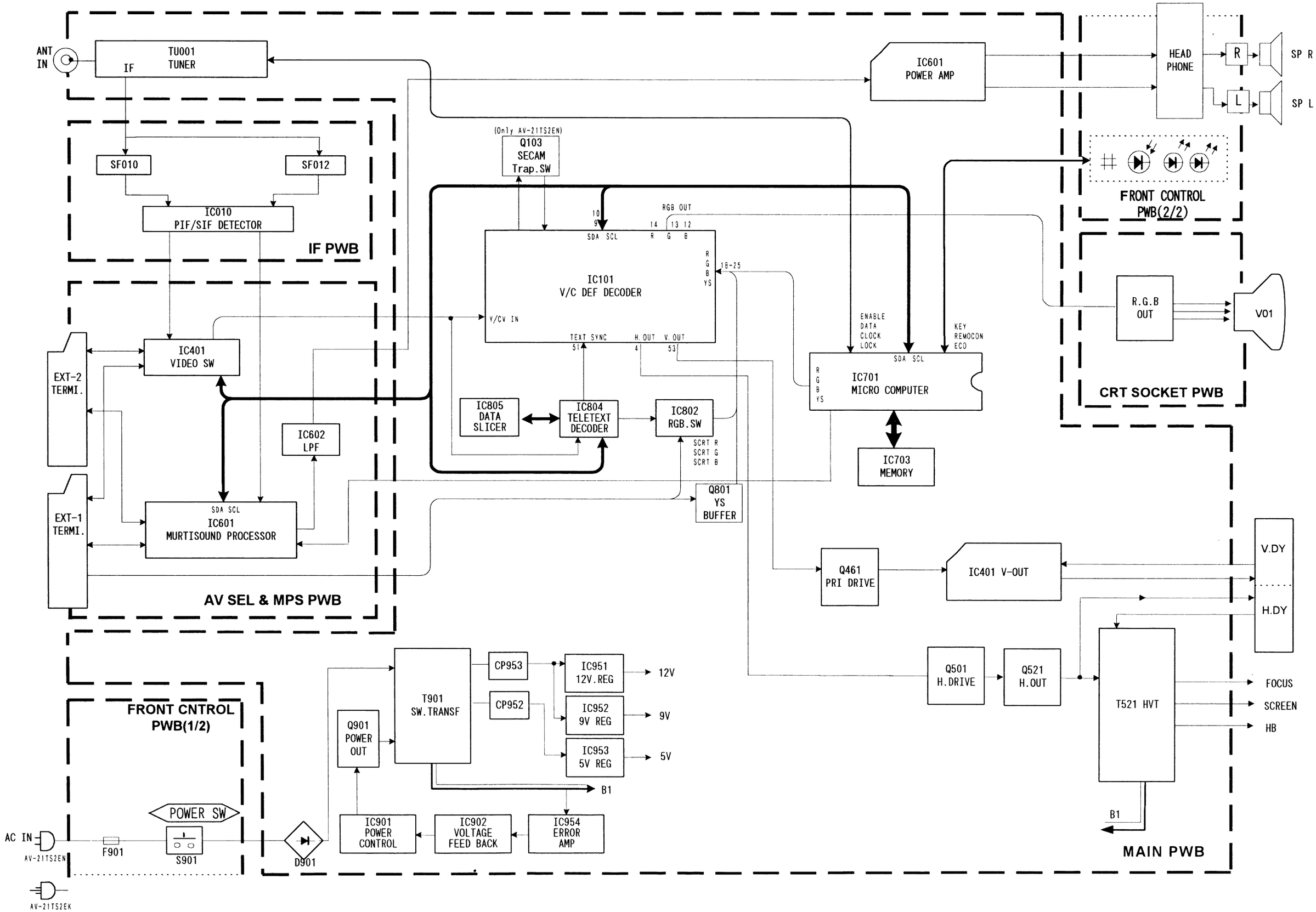
*	SJE 05002A-U2	SJE 05903A-U2
CN00F	X	X
C301	X	X
C304	X	X
C305	X	X
R301	X	X
R304	X	X
R305	X	X
D301	X	X

*	SJE 05002A-U2	SJE 05903A-U2
D304	X	X
D305	X	X
Q602	X	X
Q603	X	X
R616	X	X
R617	X	X
R618	X	X
C650	X	X

*	SJE 05002A-U2	SJE 05903A-U2
Y007	X	X
Y008	X	X
Y009	X	X
C525	NCT03CH-470AY	NCT03CH-470AY

	SJE 05002A-U2	SJE 05903A-U2
C526	NCT03CH-180AY	NCT03CH-180AY
Y609	X	X
Y610	X	X

	SJE 05002A-U2	SJE 05903A-U2
Y001	X	X


ANT IN
TU001 TUNER
IF
IC601 POWER AMP
HEAD PHONE
R
L
SP R
SP L
(Only AV-21TS2EN)
Q103 SECAM Trap.SW
SF010
SF012
IC010 PIF/SIF DETECTOR
IF PWB
FRONT CONTROL PWB(2/2)
RGB OUT
SDA SCL
IC101 V/C DEF DECODER
Y/CV IN
TEXT SYNC
H. OUT
V. OUT
R.G.B OUT
VO1
ENABLE
DATA
CLOCK
LOCK
KEY
REMOCON
ECO
IC701 MICRO COMPUTER
CRT SOCKET PWB
EXT-2 TERMI.
IC401 VIDEO SW
IC805 DATA SLICER
IC804 TELETEXT DECODER
IC802 RGB.SW
SCRT R
SCRT G
SCRT B
IC602 LPF
IC703 MEMORY
Q801 YS BUFFER
EXT-1 TERMI.
SDA SCL
IC601 MURTISOUND PROCESSOR
AV SEL & MPS PWB
Q461 PRI DRIVE
IC401 V-OUT
V.DY
H.DY
Q501 H.DRIVE
Q521 H.OUT
T521 HVT
FOCUS
SCREEN
HB
B1
FRONT CNTROL PWB(1/2)
T901 SW.TRANSF
CP953
CP952
IC951 12V.REG
IC952 9V REG
IC953 5V REG
12V
9V
5V
Q901 POWER OUT
POWER SW
AC IN
AV-21TS2EN
F901
S901
D901
IC901 POWER CONTROL
IC902 VOLTAGE FEED BACK
IC954 ERROR AMP
AV-21TS2EK
MAIN PWB

CRT SOCKET PWB ASS'Y
SJE-3003A-U2

CHRB06-38-T
CN004
TO MAIN PWB ASSY
+12V 1
GND 2
B 3
G 4
R 5
STDBY 10V 6
12V

R126 100 1/2W
C105 47/16
R106 *
11.5V
Y105 *
R103 100
2.2V
H009 CEHP00N-001Q
149V
Q106 2SC4544-C1 VIDEO AMP(B)
11.3V
Q103 * VIDEO AMP
1.7V
Y105 *
R117 15k 2W OMA
L103 180
R116 15k 2W OMA
R120 1k QRZ0107-102Z
TP-47B
TP-E
Y112 0 (H)
Y111 0 (H)
SK001 CE42535-001J1 CRT SOCKET
C104 100/16
R143 2.2k
C103 330p
R112 180 1/4W
R111 47
R124 15k 2W OMA
R115 15k 2W OMA
L102 180
R119 1k QRZ0107-102Z
TP-47R
TP-47G
B 11 BK
R 8 RK
G 6 GK
V01 PICTURE TUBE A51EAL155X01
HV
H H G1 G2 G3
10 9 5 7 1
(H) (H) CRT GND
FOCUS
SCREEN
R131 470k 1/2S QRZ0107-474Z
C113 .001 (H) QCZ0121-102A

Q106 (C) 105Vp-p (H)
Q105 (C) 115Vp-p (H)
Q104 (C) 110Vp-p (H)

Q105 2SC4544-C1 VIDEO AMP(R)
151V
11.5V
R105 *
Y103 *
R102 100
2.3V
H010 CEHP00N-001Q
11.3V
Q102 * VIDEO AMP
1.7V
Y104 *
R142 2.2k
C102 270p
C102 NCT03CH-271AY
R109 180 1/4W
R110 47
④ : NC
⑫ : ARRESTER GND

Q104 2SC4544-C1 VIDEO AMP(G)
H011 CEHP00N-001Q
148V
11.5V
C106 .1 NCF21EZ-104AY
R104 *
Y101 * 11.3V
R101 100
2.2V
Q101 * VIDEO AMP
1.7V
Y102 *
R114 15k 2W OMA
L101 180
R113 15k 2W OMA
R118 1k QRZ0107-102Z
C124 X
R125 1/4W 470k
C123 33/250 QETM2EM-336
(H)

D121 *3
R121 1k
13.8V
13.8V
R122 4.7k
C121 10/50
Q154 *2 POWER OFF DET
0V
Y107 0
D122 X
12.3V
0V
Q153 2SC1815(YG)-T VIDEO MUTE
0V
R123 X
D123 MA3068(M)-X
R141 2.2k
C101 270p NCT03CH-271AY
R107 180 1/4W
R108 47
D124 *3
D125 *3
D126 *3
R165 0
HEATER

*	SJE-3003A-U2
Y101	0
Y102	0
Y103	0
Y104	0
Y105	0
Y106	0
R104	X
R105	X
R106	X
Q101	X
Q102	X
Q103	X

NOTE

X : NON MOUNT (OPEN)
⏚ : LOW B GND
⏚ (H) : HIGH B GND

*1 : 2SC1815(YG)-T
*2 : 2SA1162(YG)-X
*3 : DAN202K-X
BW : BUS WIRE
0 : 0Ω RESISTOR

CHRB04-30-T
CN005
TO MAIN PWB ASSY
HB 1
NC 2
GND 3
HEATER 4

FRONT CONTROL PWB ASS'Y
SJE-8004A-U2

LIVE (⏚)　ISOLATED (⏦)

⚠L01 DEG. COIL CELD018-005J7 — CNDEG [1 2] — DEG

R901 QRD121J-331SY　⚠C904 .047 MF AC275V QFZ9040-473N　⚠TH901 *

CELC055-100　L901　L902　Y909 X　Y910 X

W　CN00W　AC 2　AC 1　TO MAIN PWB ASSY

CELC055-100

Y906 X　Y905 X　⚠LF901　Y907 X　Y908 X　⚠LF901 *

PW　CN0PW　BLU 2　BRN 1　⚠S901 MAIN POWER QSP4K21-C01　VA901 X

AC230V 50Hz (AC220~240V)　⚠POWER CORD　⚠F901 T3.15AH QMF51D2-3R15J1

AEEMP001-185 :EN

BLU　BRN　⚠AC230V 50Hz (AC220~240V)　AEEMP003-185A :EK　POWER CORD

NOTE
- *1: DAN202K-X
- *2: DTA144TKA-X
- X : OPEN(NON MOUNT)
- BW: BUS WIRE

5V

Q002 *2 LED SW　5V　1.4V　4.7V　R005 560 (G)　R006 560 (R)　R019 X

Q003 *2 LED SW　5V　4.7V　1.4V

VR QSP1A11-C18Z　S001　R012 3.9k　R009 8.2k　R013 4.7k

CH V(DOWN) QSP1A11-C18Z　S002　R010 3.3k

CH Λ(UP) QSP1A11-C18Z　S003

D010 POWER (STD BY RED) (POWER ON GRN) SPR-39MVWF　D015 *1

Q001 2SC2712(YG)-X ECO DRIVE　5V　2.2V~5.6V　2.2V~4.8V　R003 *　R004 10k　D007 P1201 ECO SENSER　C003 10/50　R018 X　D008 *1

IC001 REMOCON RECEVER GP1U721Q or GP1U781Q　OUT Vcc GND　1 2 3　4.7V 5V 0V　C004 .1

R008 6.8k

D012 TIMER (ORG) SLA-342DU3F or SLA-34DU3F　D009 ECO (GRN) SLA-342MG3F

D013 MA3068(M)-X　C005 100/16

C006 1000/35　C007 1000/35　R007 *

J001 HEADPHONE JACK QMS3004-C01　GND 1 6　L 5 4　R 2 3　7 8 9

C001 .0022　L002 5.6　L001 CE41832-001　R001 270 1/4W　R015 1k　C002 .0022　R002 270 1/4W　L003 5.6　R016 1k

CNOSL *　1 SP+ ← SP+ ← SP+ WOOFER　2 SP+ ← SP- ← SP-　3 SP- ← SP- ← SP- TWEETER　4 SP+ ← SP+ ← SP+　C008 *　L

CNOSR *　1 SP+ ← SP+ ← SP+ WOOFER　2 SP+ ← SP- ← SP-　3 SP- ← SP- ← SP- TWEETER　4 SP+ ← SP+ ← SP+　C009 *　R

*J002 V3 IN　*J003 L3 IN　EXT-3 X　*J004 R3 IN

*R017　*L010　*C010　*C011　*L012　*L011

D016 X

F　*CN00F　5 4 3 2 1　R3　GND(A)　L3　GND(V)　V3

CN006　25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

GND GND GND SP_R SP_R SP_L SP_L 12V NC H/P DET NC NC P.ON/OFF KEY2 KEY1 STDBY_5V REMOCON ECO.OUT TIMER_ON/OFF ECO.LED GND GND NC NC NC

CN006 CHC10BN-25T-A

TO AV SEL & MSP PWB ASS'Y　TO MAIN PWB ASS'Y

*	SJE-8004A-U2
R003	22K
R007	X
R017	X
C008	X
C009	X
CNOSL	CH41169-003Y

*	SJE-8004A-U2
CNOSR	CH41169-003Y
Y002	IM-BW
J002	X
J003	X
J004	X
C010	X

*	SJE-8004A-U2
C011	X
L010	X
L011	X
L012	X
CN00F	X
⚠LF901	AEELF002-001

*	SJE-8004A-U2
⚠TH901	CEKP010-001J2

IF PWB ASS'Y SJE0F001A-U2 (EN)
SJE0F901A-U2 (EK)

NOTE
*1: 2SC2712(YG)-X
*2: 2SA1162(YG)-X
X : OPEN(NON MOUNT)

MAIN PWB ASS'Y

CN003
CHB302W-20P-A

GND
L-VL/OTH
12V
IF
IF
IF
IF
GND
L AUDIO
APC FILTER
AFC
SD
S. AGC FILTER
9V
SIF
L/OTH
NOISE
AGC
V tv
LV_LEVEL

IC010
TA8865BN
PIF/SIF
DETECTOR

H. AFC FILTER
MUTE FILTER
2nd AGC FILTER
PIF Vcc
1st AGC FILTER
PIF IN
PIF IN
PIF GND
SIF Vcc
SIF IN B
SIF IN B
SIF GND
SIF IN A
SIF IN A
S. AGC FILTER
AUDIO OUT
FM DET
AFT OUT

H. VCO
MUTE OUT
SYNC IN
VIDEO OUT
MODE SEL
LOOK FILTER
PIF VCO
PIF VCO
VCO GND
LOOP FILTER
VCO Vcc
SIF VCO
SIF VCO
APC FILTER
1st SIF OUT
L/BG SECAM adjustment
RIMITER IN RF AGC DELAY
RF AGC OUT

Q080 *1
SIF BUFFER

Q101 *1
BUFFER

Q102 X
BUFFER

Q103 X
SYSTEM SW

Q104
PHASE COMPENSATOR

Q105 X
SYSTEM SW

Q106 X
BUFFER

Q107 *2
BUFFER

Q108 X
SYSTEM SW

Q109
PHASE COMPENSATOR

Q109 *1

Q110 *1
BUFFER

Q120 X
SYSTEM SW

Q121 X
SYSTEM SW

Q122 X
SYSTEM SW

Q123 X
SYSTEM SW

Q124 X
SYSTEM SW

Q125 X
SYSTEM SW

Q126 X
SYSTEM SW

Q501 X
AMP

Q602 X
BUFFER

T020 X
T050 CELT001-303
T051 X

SF010 *
SF011 X
SF012 *
CE41131-4R7Y
L040 4.7
L030 CE41131-2R2Y
L030 2.2
L070 5.6
CE41131-5R6Y

Y002 X
Y004 0
Y005 0
Y006 0
Y010 X
Y019 0
Y020 0

CF140 CSB503F30
CF100 *

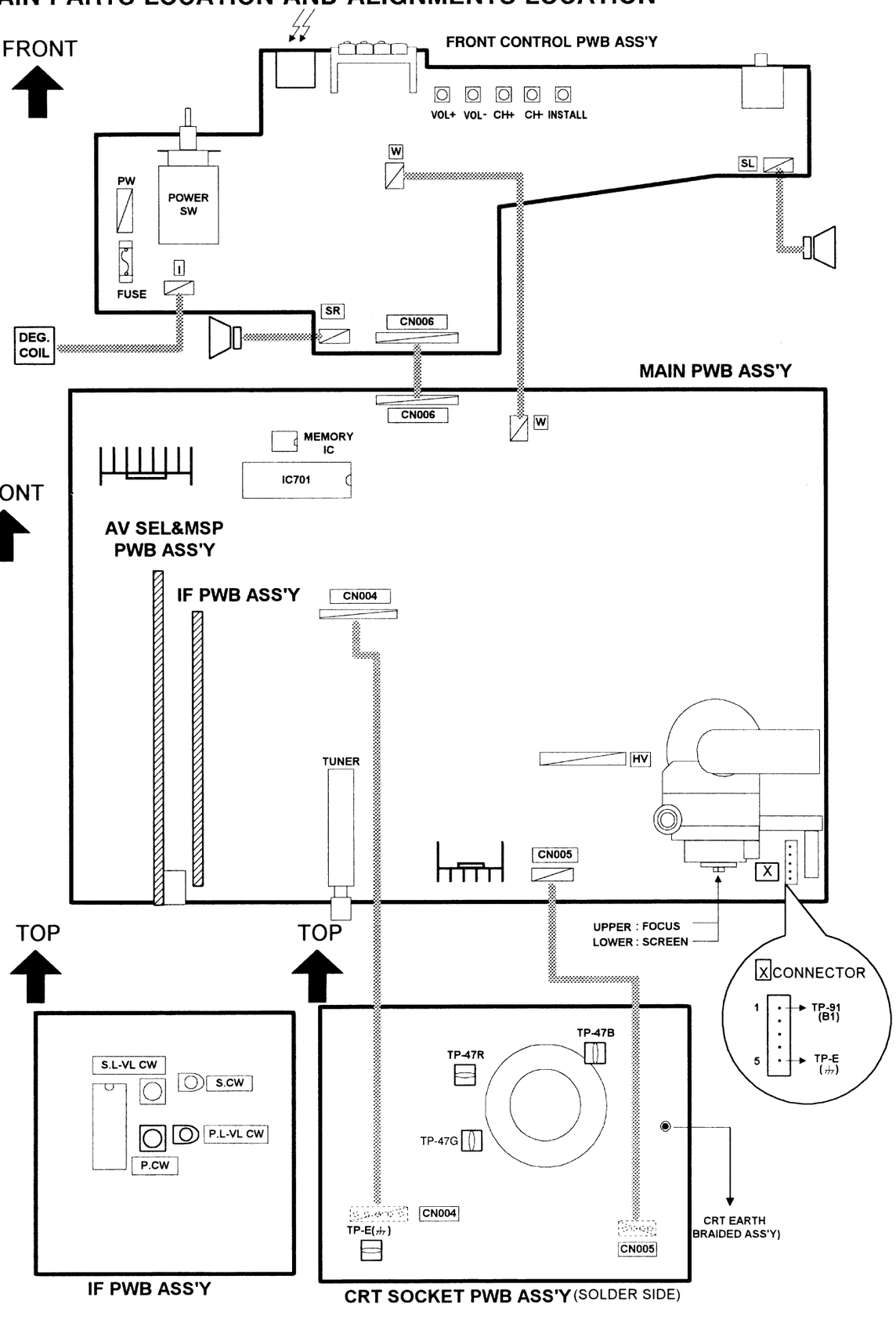
9V
12V
L-VL/OTHERS
L/OTHERS
SIF
Vtv
B/G
1st SIF
S.L-VL CW
P.CW
P.L-VL CW
S.CW
L V LEVEL

IC010 (22)
2Vp-p (H)
1Vp-p (H)

DIFFERENCE LIST (*PARTS)

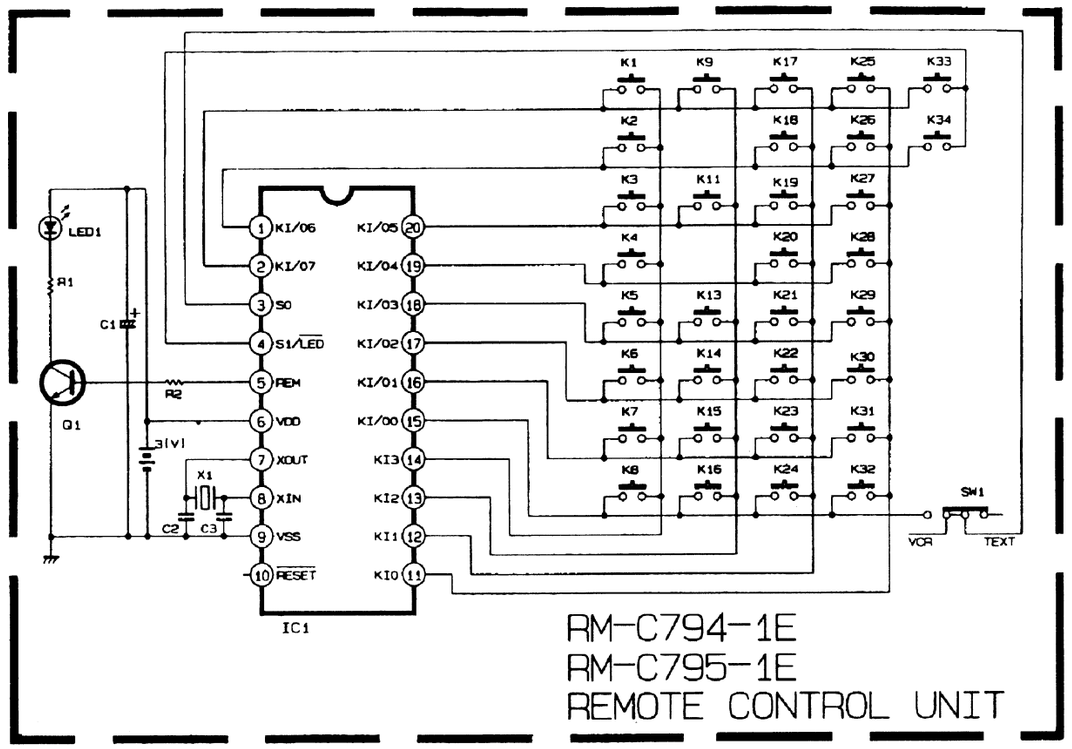
*	SJE 0F001A-U2	SJE 0F901A-U2
SF010	QAX0316 -001	QAX0315 -001
SF012	CE42606 -701	CE41031 -301
CF100	TPS 5.5MW	TPSH6.0 MB
L103	CE41131 -100Y	CE41131 -8R2Y
L104	CE41131 -5R6Y	CE41131 -8R2Y
R109	270	150
R112	100	150
R113	120	270
R114	470	330
R115	2.2k	X

MAIN PARTS LOCATION AND ALIGNMENTS LOCATION



REMOTE CONTROL TRANSMITTER CIRCUIT DIAGRAM

[AV-21TS2EN : RM-C795-1E] [AV-21TS2EK : RM-C794-1E]



■KEY FUNCTION

No.	Key Name	No.	Key Name	No.	Key Name	No.	Key Name
1	1	14	3D	22	MODE (TEXT)	29	CANCEL (TEXT)
2	2	15	P.BASS		REW ◀◀ (VCR)		STOP ■ (VCR)
3	3	16	PIP	23	SIZE (TEXT)	30	INDEX (TEXT)
4	4	17			FF ▶▶ (VCR)		⏻/I (VCR)
5	5	18	REVEAL (TEXT)	24	SUB PAGE(TEXT)	31	▲
6	6		PLAY ▶ (VCR)		P ∨ (VCR)	32	◀
7	7	19	TV	25		33	▼
8	8	20	MENU/OK	26	STORE (TEXT)	34	▶
9	9	21	HOLD (TEXT)		(VCR)		
11	0		P ∧ (VCR)	27	⏻/I		
13	ZOOM			28			

DIFFERENCE LIST (*PARTS)

P2-9~2-10

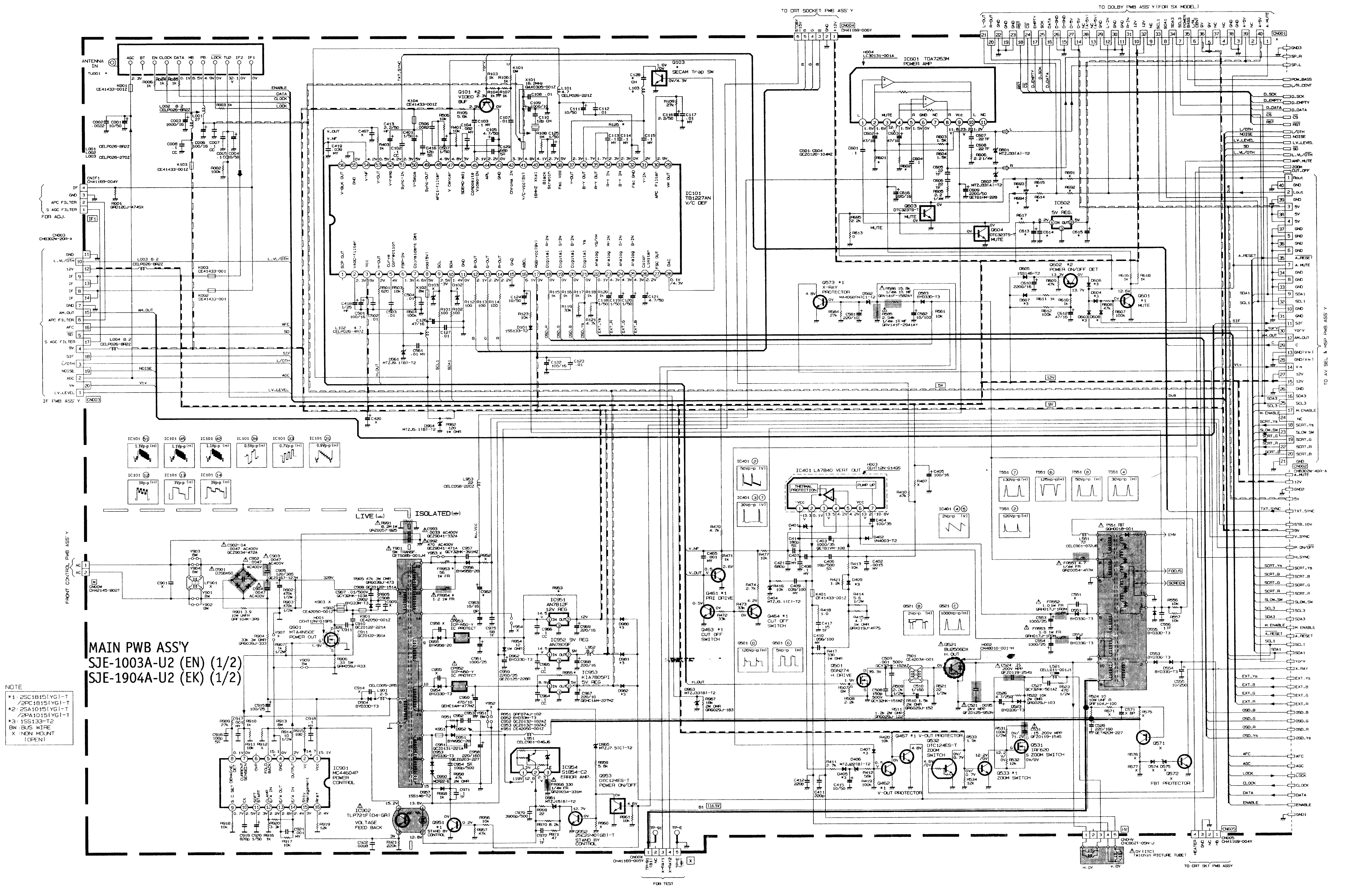
*	21TS2EK SJE-1904A-U2	21TS2EN SJE-1003A-U2
TU001	CEEK380 -B01	CEEK481 -B02
L103	×	CELP026 -330Z
Q103	×	DTC124 ESA-T
R125	BW	470
C128	×	39p CH
IC602	×	×
D608	×	×
R601	47	47
R602	47	47
R617	×	×
C613	×	×
C614	×	×
C615	×	×
Y601	BW	BW
Y602	BW	BW
R953	×	×
R955	QRG029J -180	QRG029J -180
FR953	×	×
⚠FR954	QRH017J -1R2M	QRH017J -1R2M
C962	QEHB1VM -108M	QEHB1VM -108M
CN001	×	×
R614	0	0
R615	0	0
R691	100K	100K
R692	100K	100K
R693	100K	100K
R694	100K	100K
R691	100	100
R692	100	100

P2-11~2-12

*	21TS2EK SJE-1904A-U2	21TS2EN SJE-1003A-U2
IC701	M37204M C-C40SP	M37204M C-C40SP
R706	×	×
IC703	AT24C16 21TS2EK	AT24C16 21TS2EN
D703	MTZJ3.6 (A)-T2	×

MAIN PWB ASS'Y
SJE-1003A-U2 (EN) (2/2)
SJE-1904A-U2 (EK) (2/2)

NOTE
*1:2SC1815(YG)-T
/2PC1815(YG)-T
*2:2SA1015(YG)-T
/2PA1015(YG)-T
*3:1SS133-T2
X :OPEN (NON MOUNT)
BW:BUS WIRE


MAIN PWB ASS'Y
SJE-1003A-U2 (EN) (1/2)
SJE-1904A-U2 (EK) (1/2)
NOTE
*1: 2SC1815(YG)-T /2PC1815(YG)-T
*2: 2SA1015(YG)-T /2PA1015(YG)-T
*3: 1SS133-T2
BW: BUS WIRE
X: NON MOUNT (OPEN)
ANTENNA IN
TU001 *
IF PWB ASS'Y
CN003
CNIF1 CH41169-004Y
FOR ADJ.
TO CRT SOCKET PWB ASS'Y
CN004 CH41169-006Y
TO DOLBY PWB ASS'Y(FOR SX MODEL)
CN001
IC101 TB1227AN V/C DEF
IC601 TDA7263M POWER AMP
IC602 5V REG.
Q103 SECAM Trap SW
Q101 *2 VIDEO BUF
Q573 *1 X-RAY PROTECTOR
Q602 *2 POWER ON/OFF DET
Q601 *1 MUTE
Q603 DTC323TS-T MUTE
Q604 DTC323TS-T MUTE
TO AV SEL & MSP PWB ASS'Y
CN002 CHB302W-40R-A
LIVE
ISOLATED
FRONT CONTROL PWB ASS'Y
CN00W CH42145-802T
T901 SW TRANSF. CETS085-001J4
Q901 MTA4N60E POWER OUT
IC901 MC44604P POWER CONTROL
IC902 TLP721F(D4-GR) VOLTAGE FEED BACK
Q951 *1 STAND BY CONTROL
IC951 AN7812F 12V REG
IC952 9V REG AN7809F
IC953 KIA7805PI 5V REG
IC954 S1854-C2 ERROR AMP.
Q952 2SC2240(GB)-T STAND BY CONTROL
Q953 DTC124ES-T POWER ON/OFF
CN00X CH41169-005Y
FOR TEST
IC401 LA7840 VERT OUT
THERMAL PROTECTION
PUMP UP
Q461 *1 PRI DRIVE
Q463 *1 CUT OFF SWITCH
Q464 *1 CUT OFF SWITCH
Q501 BSN274 H. DRIVE
Q521 BU2506DX H. OUT
T551 FBT QQH0018-001
EHV
FOCUS
SCREEN
Q467 *1 V-OUT PROTECTOR
Q532 DTC124ES-T ZOOM SWITCH
Q531 IRF620 S ZOOM SWITCH
Q533 *1 ZOOM SWITCH
Q462 *1 V-OUT PROTECTOR
Q571 X
Q572 X FBT PROTECTOR
CNOHV CHC802T-05N-J
DY (ITC) (Within PICTURE TUBE)
H. DY
V. DY
CN005 CH41169-004Y
TO CRT SKT PWB ASSY